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1/26/05 2681

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Group Art Unit: 2681

MARKUS VALTER WITTE

Examiner: David Q. Nguyen

Serial No.: 10/023,538

Filed: December 17, 2001

For: REMOTE COMMUNICATION SYSTEM FOR USE WITH A VEHICLE

Attorney Docket No.: 201-0028 (81047337) (FMC 1788 PUSA)

TRANSMITTAL LETTER

Mail Stop Issue Fee
Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In this patent application, the Applicant claimed foreign priority benefits under Title 35 of the United States Code Section 119 of the foreign application:

<u>Filing No.</u>	<u>Country</u>	<u>Filing Date</u>
00128309.2	EPO	December 22, 2000

Enclosed is the certified copy of the priority application EPO 00128309.2.

Respectfully submitted,

MARKUS VALTER WITTE et al.

By:

James N. Kallis
Reg. No. 41,102
Attorney for Applicant

Date: January 21, 2005
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1000 Town Center, 22nd Floor
Southfield, MI 48075
Phone: 248-358-4400
Fax: 248-358-3351

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Issue Fee, Commissioner for Patents, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:

January 21, 2005
Date of Deposit

James N. Kallis
Name of Person Signing

Signature



Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

Bescheinigung

Certificate

Attestation

Die angehefteten Unterla-
gen stimmen mit den in
den Akten befindlichen
Unterlagen der unten be-
zeichneten europäischen
Patentanmeldung überein
(Regel 94(4) EPU).

The attached is a true copy
of documents contained in
the European patent appli-
cation indicated below
(Rule 94(4) EPC).

Les documents ci-annexés
sont conformes aux
documents figurant dans
le dossier de la demande
de brevet dont le numéro
est indiqué ci-dessous
(règle 94(4) CBE).

Patentanmeldung Nr. Patent application No. Demande de brevet n°
00128309.2

PRIORITY DOCUMENT
CERTIFIED COPY OF



04/01/05

München, den
Munich,
Munich, le

Der Präsident des Europäischen Patentamts;
Im Auftrag.

For the President of the European Patent Office.

Le Président de l'Office européen des brevets



Antrag auf Erteilung eines europäischen Patents / Request for grant of 1 a European patent / Requête en délivrance d'un brevet européen

Bestätigung einer bereits durch Telefax eingereichten Anmeldung / Confirmation of an application already filed by facsimile / Confirmation d'une demande déjà déposée par téléfax
Wenn ja, Datum der Übermittlung des Telefax und Name der Einreichungsbehörde / If yes, facsimile date and name of the authority with which the documents were filed / Si oui, date d'envoi du téléfax et nom de l'autorité de dépôt

☒ Ja / Yes / Oui
Datum / Date Behörde / Authority / Autorité
20001221 EPO. München

Nur für amtlichen Gebrauch / For official use only / Cadre réservé à l'administration

Anmeldenummer / Application No. / N° de la demande	MKEY	1	00128 309.2
Tag des Eingangs (Regel 24(2)) / Date of receipt (Rule 24(2)) / Date de réception (règle 24(2))	DREC	2	
Tag des Eingangs beim EPA (Regel 24(4)) / Date of receipt at EPO (Rule 24(4)) / Date de réception à l'OEB (règle 24(4))	RENA	3	
Anmeldetag / Date of filing / Date de dépôt		4	

Tabulatoren-Positionen / Tabulation marks / Arrêts de tabulation

Es wird die Erteilung eines europäischen Patents und gemäß Artikel 94 die Prüfung der Anmeldung beantragt / Grant of a European patent, and examination of the application under Article 94, are hereby requested / Il est demandé la délivrance d'un brevet européen et, conformément à l'article 94, l'examen de la demande

EXAM 4

5 ☒ Prüfungsantrag in einer zugelassenen Nichtamtssprache (siehe Merkblatt II, 5) / Request for examination in an admissible non-EPO language (see Notes II, 5) / Requête en examen dans une langue non officielle autorisée (voir notice II, 5):

Zeichen des Anmelders oder Vertreters (max. 15 Positionen) / Applicant's or representative's reference (maximum 15 spaces) / Référence du demandeur ou du mandataire (max. 15 caractères ou espaces)

AREF

6 EP-2006853

Anmelder / Applicant / Demandeur

Name / Nom

Anschrift / Address / Adresse

7 FORD GLOBAL TECHNOLOGIES, INC

8 Suite 600, Parklane Towers East
Dearborn, Michigan 48126
USA

APPR 01 #

DEST

Zustellanschrift / Address for correspondence / Adresse pour la correspondance

9

PADR

Staat des Wohnsitzes oder Sitzes / State of residence or of principal place of business / Etat du domicile ou du siège

10 USA

Staatsangehörigkeit / Nationality / Nationalité

11 USA

Telefon / Telephone / Téléphone

Telex / Télex

Telefax / Fax / Téléfax

Weitere(r) Anmelder auf Zusatzblatt / Additional applicant(s) on additional sheet / Autre(s) demandeur(s) sur feuille additionnelle

12

13

14

Vertreter / Representative / Mandataire

Name / Nom

(Nur einen Vertreter angeben, der in das europäische Patentregister eingetragen ist und an den zugestellt wird / Name only one representative who is to be listed in the Register of European Patents and to whom notification is to be made / N'indiquer qu'un seul mandataire, qui sera inscrit au Registre européen des brevets et auquel signification sera faite)

FREP 01

15 Bo Lindberg et al.

Geschäftsanschrift / Address of place of business / Adresse professionnelle

16 AWAPATENT AB
Box 11394
SE-404 28 GÖTEBORG
SWEDEN

Telefon / Telephone / Téléphone

Telex / Télex

Telefax / Fax / Téléfax

Weitere(r) Vertreter auf Zusatzblatt / Additional representative(s) on additional sheet / Autre(s) mandataire(s) sur feuille additionnelle

17 +46 31 63 02 00

18

+46 31 63 02 63

19

Vollmacht / Authorisation / Pouvoir ist beigefügt / is enclosed / joint		
ist registriert unter Nummer / has been registered under No. / a été enregistré sous le n°		GENA
Erfinder / Inventor / Invenuteur		INVT 20 # #
Anmelder ist (sind) alleinige(r) Erfinder / The applicant(s) is (are) the sole inventor(s) / Le(s) demandeur(s) est (sont) le (les) seul(s) inventeur(s)		
Erfindernennung in gesondertem Schriftstück / Designation of inventor attached / Voir la désignation de l'inventeur ci-jointe		
Bezeichnung der Erfindung / Title of invention / Titre de l'invention		
TIDE TIEN TIFR		
Prioritätserklärung / Declaration of priority / Déclaration de priorité		PRIO
01 ##.....#		
02 ##.....#		
03 ##.....#		
04 ##.....#		
Weitere Prioritätserklärung(en) auf Zusatzblatt / Additional declaration(s) of priority on additional sheet / Autre(s) déclaration(s) de priorité sur feuille additionnelle		
Es wird hiermit erklärt, daß die Anmeldung eine vollständige Übersetzung der früheren Anmeldung ist (Regel 38(4)) / It is hereby declared that the application is a complete translation of the previous application (Rule 38(4)) // Il est déclaré par la présente que la demande est une traduction intégrale de la demande antérieure (règle 38(4))		PRIO 6
Biologisches Material Die Erfindung bezieht sich auf bzw. verwendet biologisches Material, das nach Regel 28 hinterlegt worden ist.	Biological material The invention relates to and/or uses biological material deposited under Rule 28.	
BIOM 1 # #		
Die Angaben nach Regel 28(1)c) (falls noch nicht bekannt, die Hinterlegungs-stelle und das (die) Bezugszeichen [Nummer, Symbole usw.] des Hinterlegers) sind in den technischen Anmeldungsunterlagen enthalten auf / The particulars referred to in Rule 28(1)(c) (if not yet known, the depositary institution and the identification reference(s) [number, symbols etc.] of the depositor) are given in the technical documents in the application on / Les indications visées à la règle 28(1)c) (si pas encore connues, l'autorité de dépôt et la (les) référence(s) d'identification [numéro ou symboles etc.] du déposant) figurent dans les pièces techniques de la demande à la /aux		
werden später mitgeteilt / will be submitted later /seront communiquées ultérieurement		
Die Empfangsbescheinigung(en) der Hinterlegungsstelle ist (sind) beigefügt / The receipt(s) of deposit issued by the depositary institution is (are) enclosed / Le(s) récépissé(s) de dépôt délivré(s) par l'autorité de dépôt est (sont) joint(s)		
wird (werden) nachgereicht / will be filed later /sera (seront) produit(s) ultérieurement		
20		
21		Nummer Number Numéro
22		
23		
24	REMOTE COMMUNICATION SYSTEM FOR USE WITH A VEHICLE	
25	Staat / State / Etat	Anmeldetag / Date of filing / Date de dépôt Aktenzeichen / Application No. / N° de la demande
	1	
	2	
	3	
	4	
25a		
26	Matière biologique L'invention concerne et/ou utilise de la matière biologique, déposée conformément à la règle 28.	
27	Seiten(n) / page(s)	Zeile(n) / line(s) / ligne(s)
27a		
27b		
27c		

<p>Falls das biologische Material nicht vom Anmelder, sondern von einem Dritten hinterlegt wurde: / Where the biological material has been deposited by a person other than the applicant: / Lorsque la matière biologique a été déposée par une personne autre que le demandeur:</p>	<p>28 Name und Anschrift des Hinterlegers / Name and address of depositor / Nom et adresse du déposant :</p>
<p>Ermächtigung nach Regel 28(1)d) / Authorisation under Rule 28(1)(d) / L'autorisation en vertu de la règle 28(1)d)</p>	<p>28a <input type="checkbox"/></p>
<p>ist beigelegt / is enclosed / est jointe</p>	<p>28b <input type="checkbox"/></p>
<p>wird nachgereicht / will be filed later / sera produite ultérieurement</p>	<p>29 <input type="checkbox"/> Renonciation, sur document distinct, à l'engagement du requérant au titre de la règle 28(3)</p>
<p>Verzicht auf die Verpflichtung des Antragstellers nach Regel 28(3) in gesondertem Schriftstück / Waiver of the right to an undertaking from the requester pursuant to Rule 28(3) attached</p>	<p>30 <input type="checkbox"/> Conformément à la règle 28(4) il est déclaré par la présente que l'accessibilité à la matière biologique mentionnée aux rubriques 26 et 27 ne peut être réalisée que par la remise d'un échantillon à un expert</p>
<p>Gemäß Regel 28(4) wird hiermit mitgeteilt, daß der Zugang zu dem in den Feldern 26 und 27 genannten biologischen Material nur durch Herausgabe einer Probe an einen Sachverständigen hergestellt wird / It is hereby declared under Rule 28(4) that the availability of the biological material referred to in Sections 26 and 27 shall be effected only by the issue of a sample to an expert</p> <p style="text-align: right;">BIOM 3</p>	<p>31 <input type="checkbox"/></p>
<p>Nucleotid- und Aminosäuresequenzen / Nucleotide and amino acid sequences / Séquences de nucléotides et d'acides aminés</p>	<p>31 <input type="checkbox"/></p>
<p>Die Beschreibung enthält ein Sequenzprotokoll nach Regel 27a(1) / The description contains a sequence listing in accordance with Rule 27a(1) / La description contient une liste de séquences selon la règle 27bis(1)</p>	<p>31 <input type="checkbox"/></p>
<p>Der vorgeschriebene Datenträger ist beigelegt / The prescribed data carrier is enclosed / Le support de données prescrit est joint</p>	<p>31 <input type="checkbox"/></p>
<p>Es wird hiermit erklärt, daß die auf dem Datenträger gespeicherte Information mit dem schriftlichen Sequenzprotokoll übereinstimmt (Regel 27a(2)) / It is hereby stated that the information recorded on the data carrier is identical to the written sequence listing (Rule 27a(2)) / Il est déclaré par la présente que l'information figurant sur le support de données est identique à celle que contient la liste de séquences écrite (règle 27bis(2))</p>	<p>31 <input type="checkbox"/></p>
<p>Benennung der Vertragsstaaten und Erklärungen hierzu</p>	<p>32 Désignation d'Etats contractants et déclarations à ce propos</p>
<p>1. Hiermit werden sämtliche Vertragsstaaten des EPÜ benannt, die diesem bei Einreichung dieser Anmeldung angehören*.</p>	<p><input checked="" type="checkbox"/> 1. Sont désignés tous les Etats qui sont des Etats contractants de la CBE à la date du dépôt de la présente demande*.</p>
<p>Mit der Zahlung des siebenfachen Betrags einer Benennungsgebühr gelten die Benennungsgebühren für alle Vertragsstaaten als entrichtet (Art. 2 Nr. 3 GebO).</p>	<p>Les taxes de désignation sont réputées acquittées pour tous les Etats contractants dès lors qu'un montant correspondant à sept fois la taxe de désignation a été acquitté (art. 2, point 3 du RRT).</p>
<p>2. Es ist derzeit beabsichtigt, weniger als sieben Benennungsgebühren für folgende Vertragsstaaten zu entrichten (bitte Ländercodes und Vertragsstaaten angeben*):</p>	<p><input type="checkbox"/> 2. Il est actuellement envisagé de payer moins de sept taxes de désignation pour les Etats contractants suivants (prière d'indiquer codes de pays et Etats contractants*) :</p>
<p>(1) <input type="text"/></p> <p>(2) <input type="text"/></p> <p>(3) <input type="text"/></p>	<p>(4) <input type="text"/></p> <p>(5) <input type="text"/></p> <p>(6) <input type="text"/></p>
<p>Es wird beantragt, für die unter Nr. 2 nicht aufgeführten Vertragsstaaten von der Zustellung von Mitteilungen nach Regel 85a(1) und Regel 69(1) abzusehen.</p>	<p>Prière de ne pas procéder à la signification des notifications prévues par les règles 85bis(1) et 69(1) pour les Etats contractants n'ayant pas été mentionnés au n° 2.</p>
<p>3. Wird ein automatischer Abbuchungsauftrag erteilt (Feld 43), so wird das EPA beauftragt, bei Ablauf der Grundfrist nach Artikel 79(2) den siebenfachen Betrag einer Benennungsgebühr abzubuchen. Ist eine Erklärung unter Nr. 2 abgegeben worden, so sollen die Benennungsgebühren nur für die dort angegebenen Vertragsstaaten abgebucht werden, sofern dem EPA nicht bis zum Ablauf der Grundfrist ein anderslautender Auftrag zugeht.</p>	<p><input checked="" type="checkbox"/> 3. Si un ordre de prélèvement automatique est donné (rubrique 43), il est demandé à l'OEB de prélever, à l'expiration du délai normal visé à l'article 79(2), un montant correspondant à sept fois la taxe de désignation. Si une déclaration a été faite au n° 2, les taxes de désignation ne sont prélevées que pour les Etats contractants qui y sont indiqués, sauf instruction contraire reçue par l'OEB avant l'expiration du délai normal.</p>

* Stand bei Drucklegung: 19 Vertragsstaaten, und zwar: / Status when this form was printed: 19 contracting states, namely / Situation à la date d'impression: 19 Etats contractants, à savoir: AT Österreich / Austria / Autriche, BE Belgien / Belgium / Belgique, CH/LI Schweiz und Liechtenstein / Switzerland and Liechtenstein / Suisse et Liechtenstein, CY Zypern / Cyprus / Chypre, DE Deutschland / Germany / Allemagne, DK Dänemark / Denmark / Danemark, ES Spanien / Spain / Espagne, FI Finnland / Finland / Finlande, FR Frankreich / France / France, GB Vereinigtes Königreich / United Kingdom / Royaume-Uni, GR Griechenland / Greece / Grèce, IE Irland / Ireland / Irlande, IT Italien / Italy / Italie, LU Luxemburg / Luxembourg / Luxembourg, MC Monaco / Monaco / Monaco, NL Niederlande / Netherlands / Pays-Bas, PT Portugal / Portugal / Portugal, SE Schweden / Sweden / Suède

Verschiedene Anmelder für verschiedene Vertragsstaaten / Different applicants for different contracting states / Différents demandeurs pour différents Etats contractants	33 Name(n) des (der) Anmelder(s) und benannte Vertragsstaaten / Name(s) of applicant(s) and designated contracting states / Nom(s) du (des) demandeur(s) et des Etats contractants désignés												
APPR 02 # # 													
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Erstreckung des europäischen Patents Diese Anmeldung gilt als Antrag, die europäische Patentanmeldung und das darauf erteilte europäische Patent auf alle Nicht-Vertragsstaaten des EPÜ zu erstrecken, mit denen am Tag ihrer Einreichung „Erstreckungsabkommen“ bestehen (derzeit: Albanien, Litauen, Lettland, Rumänien, Slowenien, ehemalige jugoslawische Republik Mazedonien). Die Erstreckung wird jedoch nur wirksam, wenn die vorgeschriebene Erstreckungsgebühr entrichtet wird. </div> <div style="width: 48%;"> Extension of the European patent This application is deemed to be a request to extend the European patent application and the European patent granted in respect of it to all non-contracting states to the EPC with which "extension agreements" exist on the date on which the application is filed (Present situation: Albania, Lithuania, Latvia, Romania, Slovenia, former Yugoslav Republic of Macedonia). However, the extension only takes effect if the prescribed extension fee is paid. </div> </div> <div style="text-align: right; margin-top: 10px; border: 1px solid black; padding: 2px; width: fit-content;">EXPT</div> <p>Es ist derzeit beabsichtigt, die Erstreckungsgebühr für die nachfolgend angekreuzten Staaten zu entrichten: / It is currently intended to pay the extension fee for the states marked below with a cross: / Il est actuellement envisagé de payer la taxe d'extension pour les Etats dont le nom est coché ci-après :</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Albanien / Albania / Albanie</td> <td style="width: 20%; text-align: center;">AL</td> </tr> <tr> <td>Litauen / Lithuania / Lituanie</td> <td style="text-align: center;">LT</td> </tr> <tr> <td>Lettland / Latvia / Lettonie</td> <td style="text-align: center;">LV</td> </tr> <tr> <td>Rumänien / Romania / Roumanie</td> <td style="text-align: center;">RO</td> </tr> <tr> <td>Slowenien / Slovenia / Slovénie</td> <td style="text-align: center;">SI</td> </tr> <tr> <td>Ehemalige jugoslawische Republik Mazedonien / Former Yugoslav Republic of Macedonia / Ex-République yougoslave de Macédoine</td> <td style="text-align: center;">MK</td> </tr> </table> <p style="font-size: 0.8em; margin-top: 10px;">(Platz für Staaten, mit denen nach Drucklegung dieses Formblatts „Erstreckungsabkommen“ in Kraft treten) / (Space for states with which "extension agreements" enter into force after this form has been printed) / (Prévu pour des Etats à l'égard desquels des «accords d'extension» entreront en vigueur après l'impression du présent formulaire)</p>	Albanien / Albania / Albanie	AL	Litauen / Lithuania / Lituanie	LT	Lettland / Latvia / Lettonie	LV	Rumänien / Romania / Roumanie	RO	Slowenien / Slovenia / Slovénie	SI	Ehemalige jugoslawische Republik Mazedonien / Former Yugoslav Republic of Macedonia / Ex-République yougoslave de Macédoine	MK	34 Extension des effets du brevet européen <input checked="" type="checkbox"/> La présente demande est réputée constituer une requête en extension des effets de la demande de brevet européen et du brevet européen délivré sur la base de cette demande à tous les Etats non parties à la CBE avec lesquels il existe un «accord d'extension» à la date du dépôt de la demande (Situation actuelle : Albanie, Lituanie, Lettonie, Roumanie, Slovénie, ex-République yougoslave de Macédoine). Toutefois, l'extension ne produit ses effets que s'il est acquitté la taxe d'extension prescrite.
Albanien / Albania / Albanie	AL												
Litauen / Lithuania / Lituanie	LT												
Lettland / Latvia / Lettonie	LV												
Rumänien / Romania / Roumanie	RO												
Slowenien / Slovenia / Slovénie	SI												
Ehemalige jugoslawische Republik Mazedonien / Former Yugoslav Republic of Macedonia / Ex-République yougoslave de Macédoine	MK												
Die Anmeldung ist eine Teilanmeldung / The application is a divisional application / La présente demande constitue une demande divisionnaire	35 Nummer der früheren Anmeldung No. of earlier application Numéro de la demande initiale												
Es handelt sich um eine Anmeldung nach Artikel 61(1)b) / The application is an Article 61(1)(b) application / La présente demande constitue une demande selon l'article 61(1)b)	36 Nummer der früheren Anmeldung No. of earlier application Numéro de la demande initiale												
Patentansprüche / Claims / Revendications	37 11 Zahl der Patentansprüche Number of claims Nombre de revendications												
Zur Veröffentlichung mit der Zusammenfassung wird vorgeschlagen Abbildung Nr. / It is proposed that the abstract be published together with figure No. / Il est proposé de publier avec l'abrégé la figure n°	39 2 Nummer / Number / Numéro												
<div style="text-align: right; margin-top: 10px; border: 1px solid black; padding: 2px; width: fit-content;">CLMS</div>													
<div style="text-align: right; margin-top: 10px; border: 1px solid black; padding: 2px; width: fit-content;">DRAW 2</div>													

Zusätzliche Abschrift(en) der im europäischen Recherchenbericht angeführten Schriftstücke wird (werden) beantragt /
Additional copy(ies) of the documents cited in the European search report is (are) requested /
Prière de fournir une (des) copie(s) supplémentaire(s) des documents cités dans le rapport de recherche européenne

ASOC

40

1

Anzahl der **zusätzlichen** Sätze von Abschriften
Number of **additional** sets of copies
Nombre de jeux **supplémentaires** de copies

Es wird die Rückerstattung der Recherchegebühr gemäß Art. 10 GebO beantragt / Refund of the search fee is requested pursuant to Article 10 of the Rules relating to Fees / Le remboursement de la taxe de recherche est demandé en vertu de l'article 10 du règlement relatif aux taxes

41

☐

Eine Kopie des Recherchenberichts ist beigelegt /
A copy of the search report is attached /
Une copie du rapport de recherche est jointe

42

☐

Automatischer Abbuchungsauftrag

(nur möglich für Inhaber von beim
EPA geführten laufenden Konten)

Das EPA wird hiermit beauftragt, fällig werdende Gebühren und Auslagen nach Maßgabe der Vorschriften über das automatische Abbuchungsverfahren vom nebenstehenden laufenden Konto abzubuchen. In Bezug auf die **Benennungsgebühren** wird auf Feld 32.3 verwiesen. Das EPA wird ferner beauftragt, die **Erstreckungsgebühren** für jeden in Feld 34 angekreuzten »Erstreckungsstaat« bei Ablauf der Grundfrist zu ihrer Zahlung abzubuchen, sofern ihm nicht bis dahin ein anderslautender Auftrag zugeht.

Automatic debit order (for EPO deposit account holders only)

The EPO is hereby authorised, under the Arrangements for the automatic debiting procedure, to debit from the deposit account opposite any fees and costs falling due. With regard to **designation fees** reference is made to Section 32.3. The EPO is also authorised, on expiry of the basic period for its payment, to debit the **extension fee** for each of the "extension states" marked with a cross in Section 34, unless it is instructed to do otherwise before expiry of this period.

Für automatischen Abbuchungsauftrag:
For automatic debit order:
Pour l'ordre de prélèvement automatique :

DECA

43

Ordre de prélèvement automatique

(possibilité offerte uniquement
aux titulaires de comptes courants
ouverts auprès de l'OEB)

Par la présente, il est demandé à l'OEB de prélever du compte courant ci-dessous les taxes et frais venant à échéance, conformément à la réglementation relative à la procédure de prélèvement automatique. Pour les **taxes de désignation**, se reporter à la rubrique 32.3. Il est en outre demandé à l'OEB de prélever, à l'expiration du délai normal prévu pour leur paiement, les **taxes d'extension** pour chaque »Etat autorisant l'extension« coché à la rubrique 34, sauf instruction contraire reçue avant l'expiration de ce délai.

Nummer des laufenden Kontos /
Deposit account number /
Numéro du compte courant

Name des Kontoinhabers /
Account holder's name /
Nom du titulaire du compte

Nummer des laufenden Kontos /
Deposit account number /
Numéro du compte courant

Name des Kontoinhabers /
Account holder's name /
Nom du titulaire du compte

44

2810 0022

AWAPATENT AB

Eventuelle Rückzahlungen auf das nebenstehende beim EPA geführte laufende Konto / **Reimbursement**, if any, to EPO deposit account opposite / **Remboursements** éventuels à effectuer sur le compte courant ci-contre ouvert auprès de l'OEB

DEPA

45

Die vorgeschriebene Liste über die diesem Antrag beigelegten Unterlagen ergibt sich aus der vorbe-reiteten Empfangsbescheinigung (Seite 6 dieses Antrages)

The prescribed list of documents enclosed with this request is shown on the prepared receipt (page 6 of this request)

La liste prescrite des documents joints à cette requête figure sur le récépissé préétabli (page 6 de la présente requête)

46

Für Angestellte nach Artikel 133(3) Satz 1 mit allgemeiner Vollmacht /
For employees under Article 133(3), 1st sentence, having a general authorisation / Pour les employés mentionnés à l'article 133(3), 1^{re} phrase, munis d'un pouvoir général

Nr. / No. / n° :

Ort / Place / Lieu Göteborg

Datum / Date 21 December 2000



Bo Lindberg
Authorized Representative AWAPATENT AB

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AWAPATENT[®]

DESIGNATION OF INVENTOR

(where the applicant is not the inventor or is not the sole inventor)

Application No.

Applicant's or Representative's Reference:

2006853

In respect of the European patent application (title of the invention)

REMOTE COMMUNICATION SYSTEM FOR USE WITH A VEHICLE

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Statement indicating the origin of the right to the European patent.

By agreement

Place GÖTEBORG

Date 2000-12-22

Signature(s) of Applicant(s) or Representative(s)

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*) - Please supplement signature(s) by typewritten name(s) -

REMOTE COMMUNICATION SYSTEM FOR USE WITH A VEHICLE

Technical field of the Invention

The present invention relates to a remote communication system for use with a vehicle. It also relates to a fob unit for use in such a remote communication system.

5

Background art

Many systems for remote tracking of a vehicle, using for example the global positioning system, a cellular network or direct RF communication, are previously known. However, most of these systems are passive, only providing information regarding the position of the vehicle. Further, some systems have been suggested, providing the possibility of remote control of certain features within the vehicle, such as starting the engine for warm-up, but these systems are usually operated with RF communication or the like, thereby having a limited range.

In the patent document EP-0 955 219 a system is suggested in which a cellular telephone terminal may be used in order to connect with a vehicle from a remote connection. However, such a communication is rather unsafe, since a cellular telephone usually does not provide for a safe authorization of the connection before it is established. Furthermore, a cellular telephone is not designed to be used for controlling a vehicle, and consequently, more advanced monitoring may be quite complicated to accomplish.

Therefore, it is a primary object of the present invention is to provide a system that enables a user to make a safe and simple remote connection with a vehicle, for example for monitoring the vehicle or performing a remote check-up.

Another object of the invention is to provide a flexible system, which may be used in a variety of ways.

Summary of the invention

These and other objects are achieved by a remote communication system for use with a vehicle comprising a first communication unit, located within a vehicle, said first communication unit comprising a first transceiver, connectable with a long-distance wireless communication network 16, such as a cellular network; and a second portable communication unit, comprising a second transceiver, connectable with a unit for long-distance wireless communication, such as a cellular terminal, whereby said first and second communication units are connectable with each other using said long-distance wireless communication network, , thereby establishing a remote two-way communication link between said communication units.

By establishing a two-way communication link between a portable communication unit and a vehicle, a user is able to perform a remote check-up of the car, for example checking the gas level of the tank or whether the doors of the vehicle are locked. Further, information may be transferred over said link to or from the vehicle. For example, a travel plan, map or the like, stored in the second communication unit, may be transmitted from the second communication unit to the first communication unit.

Preferably, said second communication unit is connectable with said unit for long-distance communication using a short-distance wireless communication link. One example of such a short-distance wireless communication link is a link established between two Bluetooth circuits. By using a wireless communication link, such as the standard Bluetooth, the establishment of said link may easily be accomplished without additional external equipment.

Further, said second communication unit is preferably a fob unit. This is a practical solution, since most vehicles today are equipped with a fob for remote lock-

ing/unlocking of the vehicle doors. Consequently, a user of a vehicle normally already carries such a unit, making the system according to the invention consumer friendly.

According to one embodiment of the invention the second communication unit is integrated with a cellular terminal. This construction reduces the number of components of the system.

Further, said second communication unit preferably comprises a biometric sensor 18, for identifying a user. By first identifying a user, unauthorized remote connection to the vehicle is prevented. Further, this user identification may be used in order to personalize the vehicle and different vehicle settings.

Preferably, a direct short-distance two-way wireless communication link is established between said first and second transceivers when said communication units are within a direct communication range from each other. Further, said first communication unit suitably comprises a first memory circuit being connected with said first transceiver, and said second communication unit further comprises a second memory circuit being connected with said second transceiver, whereby an information item, stored in any one of said memory circuits is transmittable to the other one of said memory circuits, over said direct short-distance communication link when established. Consequently, over this communication link it is possible to transfer information between a portable unit and the vehicle, without active user assistance.

Preferably, said first and second communication unit each comprises an identification item, whereby a request for connection from any communication unit is tested to be qualified before a connection between said communication units is enabled. Thereby, a second communication unit requesting to connect with a first communication unit within a vehicle over said cellular network is identified, and unauthorized requests may be denied. This feature also makes it possible to determine which commu-

nication units should be able to communicate with each other, when several units are within direct communication range from each other. Consequently, a second communication unit, or a fob, may be associated with a certain vehicle, providing a safe transfer of information.

Further, said first communication unit is preferably connected with at least one vehicle data network, such as a controller area network within said vehicle. Thereby basically all features that may be measured electrically within a vehicle may be accessed in a remote communication system in accordance with the invention. Suitably, said first communication unit is connected with a vehicle computer within said vehicle. Thereby travel information, such as route plans or desired time of arrival may easily be transferred between the second communication unit and the vehicle computer.

Finally, the above mentioned and other objects are achieved by a fob unit, for use in a remote communication system as described above.

Brief description of the drawings

A currently preferred embodiment of the present invention will now be described in closer detail, with reference to the accompanying drawing.

Fig 1 is a schematic view of a system in accordance with the invention.

Fig 2 is a schematic view of one preferred embodiment of the invention.

Fig 3 is a schematic view of another aspect of the invention.

Detailed description of a preferred embodiment of the In-
vention

The embodiment of the invention, which will be de-
scribed in the following, is related to a remote communi-
5 cation system for use with a vehicle.

Referring now to figure 1, the system comprises a
first communication unit 1, being positioned within a ve-
hicle 2. The first communication unit 1 comprises a first
transceiver 3 for wireless communication and a first mem-
10 ory circuit 4, as shown in fig 2. The first memory cir-
cuit 4 is connected to said first transceiver 3, being
able to connect with a cellular network via an antenna
unit 22. The first communication unit 1 is further con-
nected with a vehicle travel computer 5 and with a con-
15 troller area network 6 within said vehicle 2.

The system further comprises a second communication
unit 7, here constituted by a portable, handheld fob
unit, comprising a second transceiver 9 for wireless com-
munication, and a second memory circuit 10, as shown in
20 fig 2. The second memory circuit 10 is connected to said
second transceiver 9, in this case being a standard Blue-
tooth circuit. Said second transceiver 9 may be connected
with a corresponding Bluetooth transceiver 21 in a cellu-
lar telephone 14 via a wireless communication link 20.
25 The establishment of this communication link 20 is in
this case performed in accordance with the Bluetooth
standard, and will not be described herein. However, it
should be mentioned that each Bluetooth circuit is
equipped with a special identification code, being unique
30 for each circuit. This identification code enables a
transceiver to establish a connection with one chosen
other transceiver within the communication range. Fur-
ther, in accordance with a preferred embodiment, each ve-
hicle is provided with several associated fob units. In
35 this case, each fob unit has a special fob ranking,
whereby the fob with the highest ranking is arranged to
override other fobs if two or several fobs are trying to

give contradicting orders to the first communication unit 1.

Further, the fob unit 7 may be equipped with a display 11, for displaying information stored in said second memory circuit 10, a processor 12 for processing information stored in said second memory circuit 10 and a clock circuit 17 for use in certain applications. The second communication unit 7 further comprises a battery 19 or the like, for providing power to the components of the second communication unit 7.

Further, the fob unit 7 comprises a biometric sensor 18, in this case a fingerprint sensor, being connected with said second transceiver 9. This biometric sensor 18 may be used to provide an identification of the fob user, preventing unauthorized use of the fob. Several different user characteristics may be stored in the second memory circuit 10.

In order to establish a remote two-way connection between the first and second communication units 1, 7, a user first makes sure that the fob unit 7 is within direct communication range of the cellular telephone terminal 14 (in the Bluetooth case <100 m), for the establishment of a direct two-way communication link 20 between the second transceiver 9 and the corresponding transceiver 21 in the cellular telephone terminal 14. Thereafter the user rings up the vehicle over the cellular network 16, and thereby connects with the first transceiver 3 of the first communication unit, via the cellular antenna unit 22 in the vehicle. Information regarding the user and fob identity, for example user information from said biometric sensor and the fob identification code, as described above, is thereafter transmitted from the fob to the first communication unit 1 of the vehicle 2. If the fob and user identities are accepted by the vehicle, a two-way connection between the first and second communication unit is allowed to be established, via the communication link 20 and the cellular network 16. If the

fob and/or user identity is not authorized by the first communication unit 1, the request for establishment of a communication link between the communication units is rejected.

5 This two-way remote communication link between said communication units 1,7 may be used in various ways. For example, a user is able to perform a remote check-up of the car, for example checking the gas level of the tank or whether the doors of the vehicle are locked. Further,
10 information may be transferred over said link to the vehicle. For example, a travel plan, map or the like, stored in the second communication unit, may be transmitted from the second communication unit to the first communication unit. What information should be transferred
15 may be decided and programmed by the manufacturer of the system or by the user, by programming the fob and/or the first communication unit in the vehicle.

 In this embodiment of the invention, the information transfer between said communication units is connected
20 with the locking or unlocking of the vehicle. A locking/unlocking device (not shown) is on per se known manner integrated in said fob unit 7. When a locking/unlocking signal is sent to the vehicle for locking/unlocking the doors of the vehicle, a part of this
25 signal is also transmitted to a trigger device (not shown) for the generation of a trigger signal. This trigger signal is thereafter transmitted to the memory units, where it triggers the execution of an information transfer operation. Further, the locking/unlocking signal may
30 be sent over the second transceiver 9, or over a separate transmission channel.

 Further, said first transceiver 3 also comprises a Bluetooth transceiver device being directly connectable
35 with said second Bluetooth transceiver 9 when said transceivers are within a short/medium distance from each other (in the Bluetooth case < 100 m), thereby establishing a direct short-distance wireless communication link 8

between the fob unit 7 and the first communication unit 1 disposed within the vehicle 2, as shown in fig 3. The establishment of this communication link 8 is in this case performed in accordance with the Bluetooth standard.

5 By means of said second transceiver 9, said fob unit 7 may also be connected with other communication units, such as a personal computer 13, a hand held computer or other on market products, as shown in fig 3. By establishing a two-way communication link between for example
10 a computer 13 and the fob unit 7 (second communication unit), an information item may be transferred between the computer and the second memory circuit 10 of the fob. This enables a user to personalize a vehicle by loading information regarding for example travel plans, personal
15 setting, road maps etc into the fob, whereby the information item is transmitted to the vehicle as soon as the fob unit and the vehicle are within communication range from each other. This information transfer may also be done by the previously described remote communication
20 fob.

By using standard transceivers, such as Bluetooth circuits, the fob may easily be adapted for use in various other applications. For example the fob unit may be programmed to function as a remote garage door opener.
25 Since provided with a user identification device, such as a biometric sensor, the fob may also be used for other purposes, such as identifying a user at a tollbooth, for direct debiting of a personal account.

The establishment of the above-described direct
30 short-distance wireless communication link 8 is described in the following. An information item is stored in the second memory circuit 10 of the fob unit 7. The second transceiver 9 of the fob unit 7 regularly sends out an identification signal. When the fob unit 7 is within a
35 communication range from a vehicle 2 having a first transceiver 3, having a corresponding transceiver device and accepting said identification signal, a communication

link 8 between the transceivers 3,9 is established. The first transceiver 3 may also send out a corresponding identification signal that must be accepted by the fob unit 7, before said communication link 8 may be established. When said communication link 8 is established, the information item that is stored in said second memory circuit 10 is transferred over the communication link 8 to the first transceiver 3 of the first communication unit 1 within the vehicle 2. Thereafter, the item is transferred from the first transceiver 3 to the first memory circuit 4 or directly to the travel computer 5 or the like.

Further, an information item stored in the first memory circuit 4 may be transferred to the fob 7 over said communication link 8 or over the remote communication link, in the same manner as described above. For example, information regarding the gasoline level may be gathered in the first memory circuit 4, and transferred to the fob unit 7 and stored in the second memory circuit 10, when leaving the vehicle 2. Consequently, this information is now available for remote check-up, since it is stored in the handheld, portable fob unit 7. Further, basically any information that may be gained through the vehicle control area network 6 may be transferred to the fob unit in the above manner. It shall be understood that the system also may comprise selector means (not shown), for selection of which information items should be transferred between the fob and the first communication unit.

The above described biometric sensor 18 of the fob may also be useful in the short-distance direct communication described above, by enabling a personalization of the vehicle when approaching the vehicle. The identification may be transmitted over said communication link 8 to the vehicle 2 as an information item, as described above. This enables the performance of personal settings in the vehicle, such as seat and steering wheel settings before entering the vehicle. By this identification, different

users may further be given different access to the vehicle, for example one-door/multi-door unlocking or access to the glove compartment.

5 A number of user profiles may be registered, enabling a number of users to be identified with said biometric sensor, and thereby providing individual settings for every registered user. One important feature is that if a non-registered user intends to use the vehicle, the fob will notice that the user is non-registered and thereby
10 putting the system into a standard mode, using pre-programmed standard settings, being chosen and programmed by a registered user. Further a registered user may program different settings for different categories of non-registered users, in this way creating different non-
15 registered user profiles, that may be activated by the fob by a registered user. Examples of such profiles may be a car work-shop profile, with restricted access to for example the car telephone, the glove compartment and the trunk, a valet profile, with further restrictions regarding the vehicle speed, and a friend profile, only re-
20 stricting the use of the car phone. The access given to a certain profile may be chosen and programmed by the registered user/users of the vehicle, and said profile is preferably activated by a registered user, before handing
25 over the fob to a non-registered user. If no special profile is chosen for the non-registered user said pre-programmed standard settings is used. Further, the above mentioned restriction of the vehicle speed for some users is possible due to said connection of the first communi-
30 cation unit with the control area network of the vehicle. All those user specific features may easily be edited at a personal computer, and transferred to the fob, and thereafter to the vehicle.

35 Consequently, the system in accordance with the invention provides for a flexible, multi-purpose communication between a handheld fob unit and a communication unit located in a vehicle.

The present invention should not be considered as being limited to the above-described embodiment, but rather includes all possible variations falling within the spirit and the scope of this invention as defined by the appended claims. Many modifications and variations of the present invention will be readily apparent to those skilled in the art.

In the above, a preferred embodiment is described in which the second communication unit is comprised in a separate fob unit. However, it is possible to include said second communication unit in for example a cellular telephone or a portable handheld computer, reducing the number of components of the system.

The system may also include a panic button, being placed on the fob unit (the second communication unit). When pushing said panic button, a message is automatically sent, via a communication link 20 to a nearby positioned cellular telephone terminal 14 and the cellular network 16, to the vehicle and to an alarm center, whereby a user is able to signal that he is in danger. By using the biometric sensor, as described above, the alarm message may further include information regarding the identity of the current user of the fob. It is also possible, by means of a positioning system, such as GPS or the like, to include information regarding the position of the user in the alarm message.

The above-described presently preferred embodiment of the invention utilizes Bluetooth circuits as the transceivers in the fob, the cellular telephone and also in the first communication unit in the vehicle. However, it is possible to use other devices and methods to establish said two-way connection between the first said devices. For example, RF circuitry may be used. The above mentioned devices should then also include control circuits for the RF circuits in order to control the communication link and its establishment, on per se known manner. The corresponding control circuits are included in the Blue-

tooth circuit. The remote communication system may also comprise two or more ways of establishing said connection. As an example, a separate communication link, such as a RF communication link, may be used for sending locking/unlocking signals for the vehicle door/doors when within a direct communication range of the vehicle, while the above described communication links 21,8 are used for remote and direct information transfer, respectively.

It shall be noted that the term transceiver as used in this application comprises various constructions, for example with separate receivers and transmitters. Further the fob unit may comprise other components, such as a mechanical vehicle key or the like.

Further it shall be noted that the term "long-distance wireless communication network" as used in this application may partly include transmission paths where the signal transfer is made in a wire or fiber, such as an alternative communication path between base stations or the like.

CLAIMS

1. A remote communication system for use with a vehicle, comprising:

5 a first communication unit (1), located within a vehicle (2), said first communication unit comprising a first transceiver (3), connectable with a long-distance wireless communication network (16), such as a cellular network (16); and

10 a second portable communication unit (7), comprising a second transceiver (9), connectable with a unit for long-distance wireless communication (14), such as a cellular terminal, whereby said first and second communication units (1,7) are connectable with each other using said long-distance wireless communication network 16, thereby establishing a remote two-way communication link between said communication units (1,7).

2. A remote communication system according to claim 20 1, wherein said second communication unit (7) is connectable with said unit for long-distance communication (14) using a short-distance wireless communication link (20).

3. A remote communication system according to claim 2, wherein said second communication unit (7) is a fob 25 unit.

4. A remote communication system according to claim 1, wherein said second communication unit (7) is integrated with a cellular telephone terminal (14).

5. A remote communication system in accordance with 30 any one of the preceding claims, wherein said second communication unit (7) further comprises a biometric sensor (18), for identifying a user.

6. Remote communication system according to any one of the preceding claims, wherein a direct two-way wireless communication link (8) is established between said 35 first and second transceivers (3,9) when said communication

tion units are within a communication range from each other.

7. A remote communication system according to any one of the preceding claim, wherein said first communication unit (1) further comprises a first memory circuit (4) being connected with said first transceiver (3), and said second communication unit (7) further comprises a second memory circuit (10) being connected with said second transceiver (9), whereby an information item, stored in any one of said memory circuits is transmittable to the other one of said memory circuits, over said direct communication link (8) when established.

8. A remote communication system according to any one of the preceding claims, wherein said first and second communication units (1,7) each comprises an identification device, whereby a request for connection from any communication unit is tested to be qualified before enabling a connection between said communication units.

9. A remote communication system according to any one of the preceding claims, wherein said first communication unit (1) is connected with at least one vehicle data network (6), such as a controller area network within said vehicle (2).

10. A remote communication system according to any one of the preceding claims, wherein said first communication unit (1) is connected with a vehicle computer (5) within said vehicle (2).

11. A fob unit, for use in a remote communication system according to any one of the claims 1-10.

30

ABSTRACT

This invention relates to a remote communication system for use with a vehicle, comprising a first communication unit (1), located within a vehicle (2), said first communication unit comprising a first transceiver (3), connectable with a long-distance wireless communication network (16), such as a cellular network; and a portable second communication unit (7), comprising a second transceiver (9), connectable with a unit for long-distance wireless communication (14), such as a cellular terminal. The first and second communication units (1,7) are connectable with each other using said long-distance wireless communication network 16, thereby establishing a remote two-way communication link between said communication units.

This invention further relates to a fob unit, for use in a remote communication system.

20

Elected for publication: fig 2

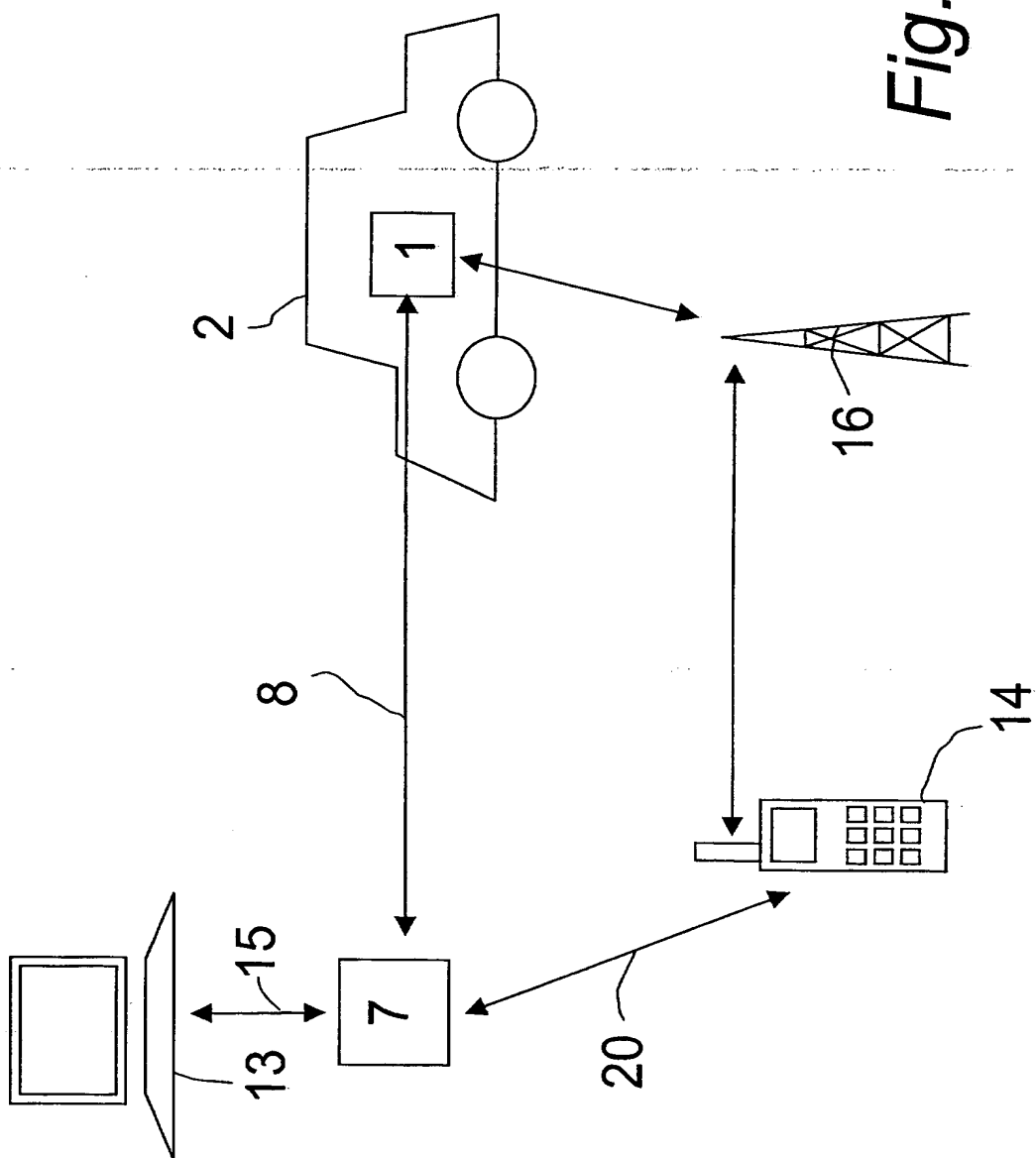


Fig. 1

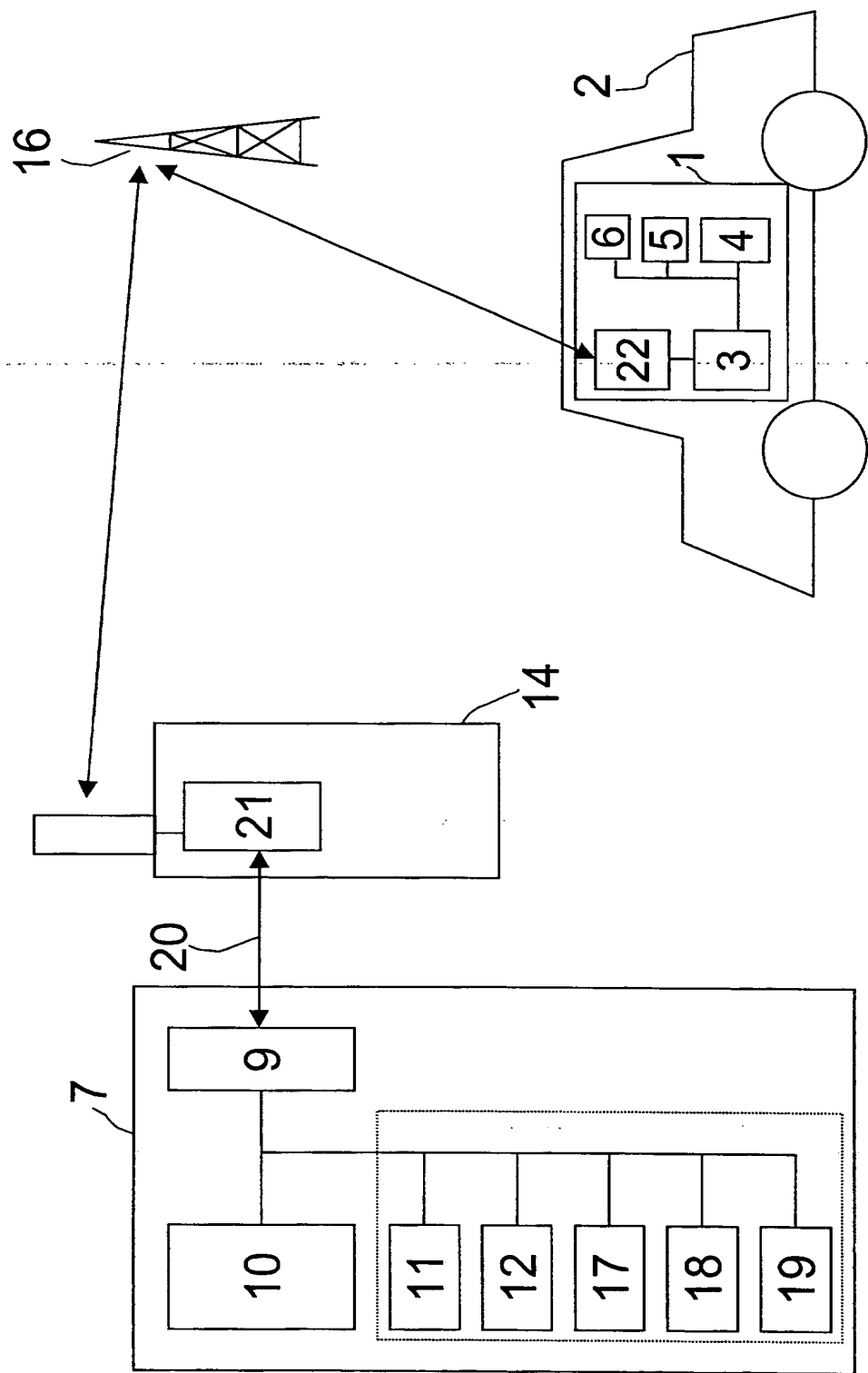


Fig. 2

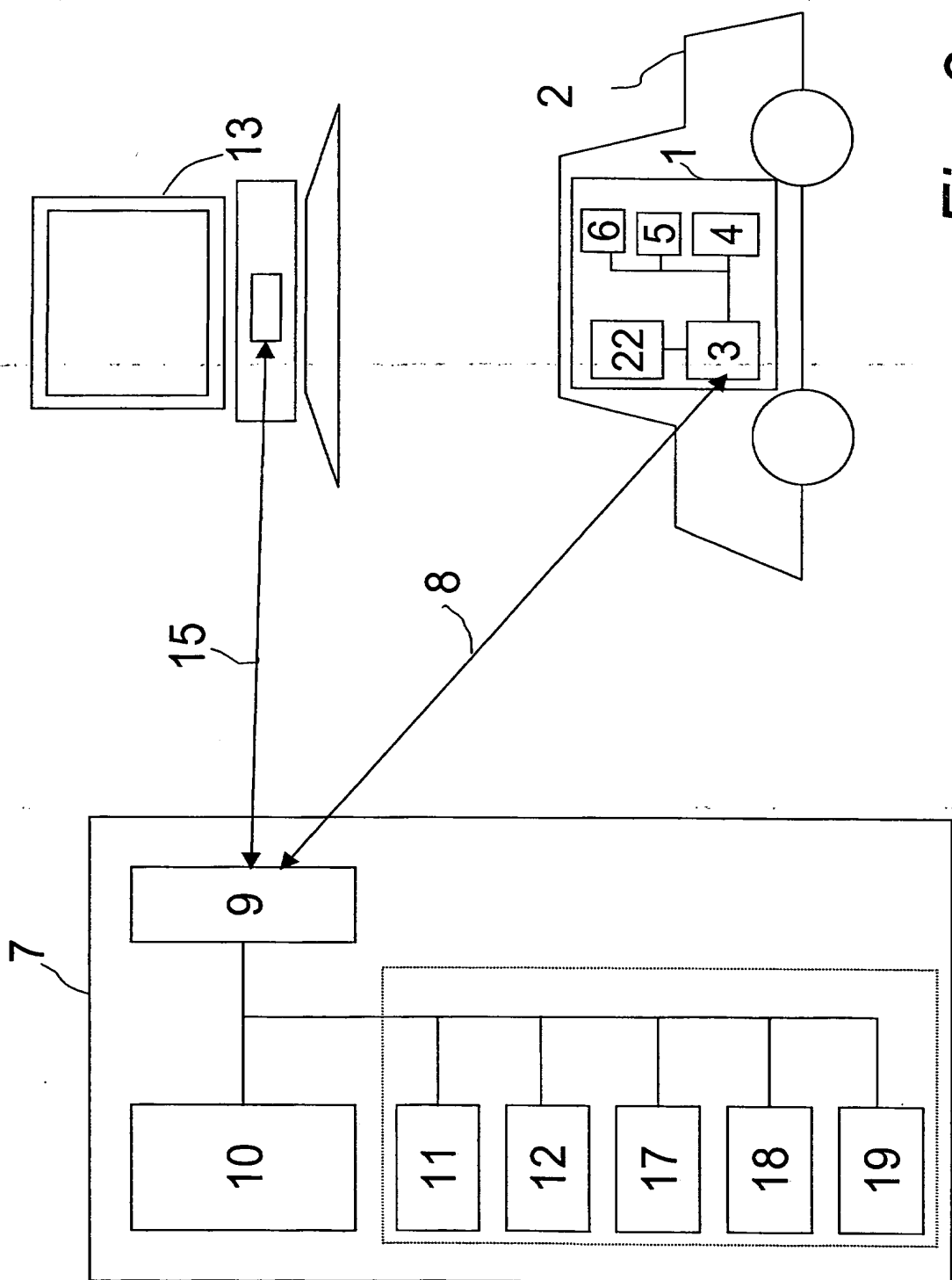


Fig. 3

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25 January 2001

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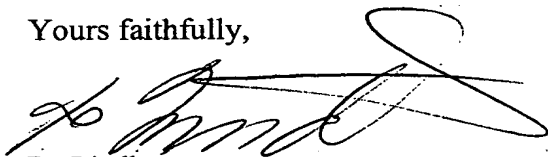
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International Application No.
Applicant(s): FORD GLOBAL TECHNOLOGIES, INC

Dear Sirs,

Please find enclosed

☒ a signed authorisation, Rule 101(4)

Yours faithfully,



Bo Lindberg

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Zeichen/Ref./Réf.

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

00128309.2-1264

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

Ford Global Technologies, Inc.

DESIGNATION AS INVENTOR - COMMUNICATION UNDER RULE 17(3) EPC

You have been designated as inventor in the above-mentioned European patent application. Below you will find the data contained in the Designation of Inventor and further data mentioned in Art. 128(5) EPC:

DATE OF FILING : 22.12.00

PRIORITY : /00.00.00/

TITLE : Remote communication system for use with a vehicle

DESIGNATED STATES : AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR

INVENTOR (PUBLISHED = 1, NOT PUBLISHED = 2):

1/Witte, Markus/Slottskogsgatan 58/414 70 Göteborg/SE

DECLARATION UNDER ARTICLE 81 EPC:

The applicant(s) has (have) acquired the right to the European patent as employer(s).

RECEIVING SECTION





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Datum/Date

30.05.01

Zeichen/Ref./Réf.

EP-2006853

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

00128309.2-2306-

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

Ford Global Technologies, Inc.

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☒ title

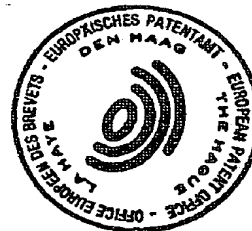
☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract:

2

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 12 8309

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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23-05-2001

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2771982	A	11-06-1999	NONE	
FR 2768831	A	26-03-1999	NONE	
EP 1031479	A	30-08-2000	NONE	
EP 1000826	A	17-05-2000	NONE	
DE 19917885	C	31-08-2000	FR 2795579 A GB 2349257 A	29-12-2000 25-10-2000



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	FR 2 771 982 A (PIE VENTURES LTD) 11 June 1999 (1999-06-11) * the whole document * ----	1-4, 6-11	B60R25/04
A	FR 2 768 831 A (VALEO SECURITE HABITACLE) 26 March 1999 (1999-03-26) * the whole document * ----	1-4	
A	EP 1 031 479 A (DELPHI TECH INC) 30 August 2000 (2000-08-30) * the whole document * ----	5	
A	EP 1 000 826 A (EATON CORP) 17 May 2000 (2000-05-17) * the whole document * ----	1-11	
A	DE 199 17 885 C (SIEMENS AG) 31 August 2000 (2000-08-31) * the whole document * -----	1-11	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B60R
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23 May 2001	Examiner Geyer, J-L
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Zeichen/Ref./Réf.

EP-2006853

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

00128309.2-2421 / 1216900

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

Ford Global Technologies, Inc.

**NOTIFICATION OF EUROPEAN PUBLICATION NUMBER AND INFORMATION ON THE
APPLICATION OF ARTICLE 67(3) EPC**

The Receiving Section hereby informs you that the technical preparations for publication of the above-mentioned European patent application have been completed.

The provisional protection under Art. 67(1) and (2) EPC in the individual Contracting States becomes effective only when the conditions referred to in Art. 67(3) EPC have been fulfilled (for further information, see EPO brochure "National Law relating to the EPC").

This application will be published on 26.06.02 with the European search report. The publication will be mentioned in European Patent Bulletin number 2002/26

The publication number is: 1216900

The title of the invention in the three official languages of the European Patent Office is worded as follows:

Ferngesteuertes, mit Kraftfahrzeugen anwenbares
Kommunikationssystem

Remote communication system for use with a vehicle

Système de communication à distance pour l'utilisation avec un
véhicule

In all future communications to the EPO, please quote the application number as indicated above, i.e. including the final four figures (which identify the Directorate responsible for the subsequent procedure).

Amendments to a European patent application or European patent must be filed in the language of the proceedings.

REMARK: An issue of the published European patent application will be forwarded to you directly from our printer.

RECEIVING SECTION





Göteborg
24 May 2002

EUROPEAN PATENT OFFICE
DG 2
DE-80298 MÜNCHEN

Handled by
Jenny Widahl/IAG

Our ref.
EP-2006853

EPO - Munich
29
29. Mai 2002

SENT BY REGISTERED MAIL


European Patent Application No 00128309.2-2421
in the name of FORD GLOBAL TECHNOLOGIES, INC

Dear Sirs,

I hereby request for examination according to Article 94(2) in the above-mentioned case.
The stipulated fees are enclosed.

Yours faithfully,

AWAPATENT AB


Bo Lindberg
Authorised Representative
AWAPATENT AB

Zur Kasse
€ 1655,- (A)

Encl.
Fee calculation sheet
Acknowledgement copy which please return!

GÖTEBORG		VAT No.	SE556082702301	Other offices:	
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Göteborg
4 December 2002

EUROPEAN PATENT OFFICE
DE-80298 MÜNCHEN

Handled by
Jenny Widahl/IAG

Our ref.
EP-2006853

SENT BY REGISTERED MAIL

EPO-Munich
54

07. Dez. 2002

European Patent Application No 00128309.2-2421
in the name of FORD GLOBAL TECHNOLOGIES, INC

Dear Sirs,

With reference to our letter dated 24 May 2002 with enclosed debit note (examination fee and designation fees) please be informed that we designate Sweden, Great Britain and Germany in the above application.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Bo Lindberg'.

Bo Lindberg
Authorised Representative
AWAPATENT AB

Encl.

Acknowledgement copy which please return!

GÖTEBORG

VAT No. SE556082702301

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Direction Générale 2

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P.O. Box 11394
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SUEDE



Formalities Officer

Name: MUMMERY

Tel.: 8212

Date

31-01-2003

Reference
EP-2006853

Application No./Patent No.
00128309.2 - 2421

Applicant/Proprietor
Ford Global Technologies, Inc.

Communication pursuant to Rule 85a(1) EPC

The designation fees (for) **AT BE CH LI CY DK ES FI FR GR IE IT LU MC NL PT TR** have not been paid in due time (Art. 79(2) EPC).

You can still validly pay the fee(s) within a period of grace of **one month** after notification of this communication, together with a surcharge of 50% (Rule 85a(1) EPC).

The surcharge is limited to a maximum of **EUR 650,00** (Art. 2, item 3b Rules relating to Fees.).

If the fee(s) **with surcharge** has (have) not been paid in due time, then, in accordance with Rule 69(1) EPC, you will be informed that

☐ the application is deemed to be withdrawn.

☒ the designation of the above-mentioned Contracting State(s) is deemed to be withdrawn.

The designation fee for each Contracting State designated is **EUR 75,00**.

If the application was filed on or after 1 July 1999, payment of seven times the amount of the designation fee constitutes payment of the designation fees for all contracting states (see OJ EPO 6/1999, 405).

Examination Division



Registered letter

EPO Form 2590 12.01 25.01.03

PFEE[DEST cc] ∞ = AT BE CH CY DK ES FI FR GR IE IT LU MC NL PT TR



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SUEDE



Formalities Officer

Name: MUMMERY

Tel.: 8212

Date

16-04-2003

Reference
EP-2006853

Application No./Patent No.
00128309.2 - 2421

Applicant/Proprietor
Ford Global Technologies, Inc.

Noting of loss of rights (R. 69(1) EPC)

In the European patent application cited above, the designation(s) of the following Contracting State(s):

AT BE CH LI CY DK ES FI FR GR IE IT LU MC NL PT TR

is (are) deemed to be withdrawn because no designation fee in respect of those State(s) was validly paid within the time limits laid down in Article 79(2) and Rules 85a and 25(2) EPC (Art. 79(3) EPC).

Possibility of appeal

If the applicant considers that the finding of the European Patent Office is inaccurate, he may, within **two months** after notification of this communication, apply in writing for a decision on this matter by the European Patent Office (R. 69(2) EPC). The application can only cause the finding to be set aside if loss of rights has not actually occurred.

Examining Division





00128309.2 - 2421

SEPU: 26.06.02

26.07.03

PACT:

Loss of particular rights

DEST/AT 16.04.03 (=LOPR(2))
DEST/BE 16.04.03 (=LOPR(2))
DEST/CH 16.04.03 (=LOPR(2))
DEST/CY 16.04.03 (=LOPR(2))
DEST/DK 16.04.03 (=LOPR(2))
DEST/ES 16.04.03 (=LOPR(2))
DEST/FI 16.04.03 (=LOPR(2))
DEST/FR 16.04.03 (=LOPR(2))
DEST/GR 16.04.03 (=LOPR(2))
DEST/IE 16.04.03 (=LOPR(2))
DEST/IT 16.04.03 (=LOPR(2))
DEST/LU 16.04.03 (=LOPR(2))
DEST/MC 16.04.03 (=LOPR(2))
DEST/NL 16.04.03 (=LOPR(2))
DEST/PT 16.04.03 (=LOPR(2))
DEST/TR 16.04.03 (=LOPR(2))

1. The time limit under Rule 69(2) EPC has expired. No appeal or application under Article 122 or Rule 69(2) EPC has been filed.
The loss of particular rights has become final.
2. Loss of particular rights and coding that finding has become final (LOPR 3).

28-07-2003

.....
Date

Dorpema, Anne
.....
Formalities Officer



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Application No. 00 128 309.2 - 2421	Ref. EP-2006853	Date 23.09.2003
Applicant Ford Global Technologies, Inc.		

Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



HAUSER-SCHMIEG M
Primary Examiner
for the Examining Division

Enclosure(s): 5 page/s reasons (Form 2906)
GB2347817A,JP10226281A



1. Decisive Application Documents

The substantive examination pursuant to Article 96 EPC is based upon the European patent application as originally filed on 22.12.2000.

2. Statement with Regard to Patentability

2.1. Independent Claim 1

Claim 1 is formulated so broadly that its subject-matter is anticipated ("incidental anticipation") even by a caller having a mobile telephone and using a so-called hands free telephone set (as for example known from GB 2 347 817 A - document D1 - or JP 10-226281 A - document D2 - both not cited in the European Search Report; copies thereof annexed) and phoning with a (another) vehicle driver or occupant having a mobile phone or a (fixed) vehicle telephone "on board".

Moreover, FR 2 771 982 A1 (document D3) discloses in the single drawing and especially in the associated description thereof (see for example page 5, lines 1-18 and 21-23, page 6, lines 6-33 and page 7, lines 6-9 (!)

- A remote communication system for use with a vehicle, comprising:
 - a first communication unit (1), located within a vehicle, said first communication unit (1) comprising a first transceiver (6, 11), connectable with a long-distance wireless communication network (7), such as a cellular network; and
 - a second portable communication unit (8), comprising a second transceiver (8), connectable with a unit for long-distance wireless communication (8), such as a cellular terminal,
 - whereby said first and second communication units (1, 8) are connectable with each other using said long-distance wireless communication network (7), thereby establishing a remote two-way communication link between said communication units (1, 8).

Remark: According to the embodiment in claim 4, the second communication unit is integrated with the cellular telephone terminal as one possibility for carrying out the invention according to claim 1 - exactly the same as disclosed on page 7, lines 6-9.



It seems that the present application does not meet the requirements of Article 52 (1) EPC because the subject-matter of claim 1 is not new in the sense of Article 54 (1) and (2) EPC in view of prior art document D3.

2.2. Dependent Claims

Claims 2-11 depending on claim 1 and having as subject-matter special embodiments of the invention according to claim 1, are not allowable since their validity is dependent on that of claim 1, which has been denied.

Further, the features of the following claims do not add anything of new matter or of inventive significance to the subject-matter of claim 1, the features being known or rendered obvious either from D3 or per se from at least one of the documents cited in conjunction therewith:

- claim 2: FR 2 768 831 A1 (document D4), see abstract + description, page 2, line 36 to page 3, line 2; lines 24-26; page 4, lines 6-16, 22-24, 29-30 and 37-38;
- claim 4: D3, see the citations mentioned above;
- claim 5: EP 1 031 479 A2 (document D5), see abstract; DE 199 17 885 C1 (document D6), see column 2, lines 3-9;
- claims 6-11: D3, see the citations mentioned above; EP 1 000 826 A2 (document D7), see column 1, lines 12-16 and paragraphs [0007], [0008], [0011], [0013], [0015], [0017] - [0022], line 19, and paragraphs [0035]-[0036].

2.3. Conclusion

At present, it is not apparent which part of the application could serve as a basis for a new, allowable claim. Nevertheless, should the applicant regard some particular matter as patentable (e.g. in the combination of claims 1 to 3 for controlling the vehicle (--> "for monitoring the vehicle or performing a remote check-up"), an independent claim including such matter should be filed taking account of Rule 29 (1) of the Implementing Regulations to the EPC. Exclusively in his letter of reply, the applicant should indicate the difference of the subject-matter of the new claim vis-à-vis the state of the art and the (inventive) significance thereof.



3. Further Objections and Suggestions for Further Proceedings

3.1. Objections and suggested Amendments with Respect to the Claims

A properly amended independent claim has to be drafted taking account of the comments above.

To meet the requirements of Rule 29 (1) of the Implementing Regulations, the independent claims should be properly cast in a two-part form, with that subject-matter which in combination is disclosed in the closest prior art document (see above) being placed in the first part.

However, if the applicant is of the opinion that a two-part form of claim would be inappropriate in the present case, he is invited to provide corresponding reasons in his reply. In addition, **the applicant should ensure that it is completely clear from the description which features of the subject-matter of the independent claim are known from the closest prior art document D1; see Guidelines part C, chapter III, paragraph 2.3 b).**

Further, in line 16 of claim 1, the reference sign "16" should be met in parentheses (Rule 29 (7) EPC); further, in claim 2, line 21, "unit" should be added between "communication" and the reference sign (14).

3.2. Objections and suggested Amendments with Respect to the Description

The description must be brought into conformity with the amended claims to be filed; care should be taken during revision, especially of the introductory portion including any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed and to avoid any infringement of Article 123 (2) EPC.

To meet the requirements of Rule 27 1) (b) of the Implementing Regulations to the EPC, the closest prior art document should be identified in the description and the relevant background art therein should be indicated.



If you are aware of a document reflecting the prior art which you describe on page 1 of the description, you are asked to identify it pursuant to Rule 27 (1) (b) of the Implementing Regulations to the EPC.

It is suggested that reference be made in the description to the invention simply by using a short reference to the claims ("the object of the invention is achieved by the subject-matter of claim 1; further advantageous embodiments thereof are defined in the dependent claims").

The first paragraph on page 11 of the description comprises an inadmissible statement ("...spirit of the invention...") with regard to extent of protection. This will cause uncertainty. The extent of protection is exclusively defined by Article 69 (1) EPC and by the "Protocol on the Interpretation of Article 69 of the Convention which shall be an integral part of the convention pursuant to Article 164 (1) EPC. Therefore, this paragraph should be deleted.

Parts of the description which are not covered by or contradictory to the subject-matter of new claims to be filed should be deleted.

3.3. General Requirements

You are requested to file the amendments to the description and the drawings respectively by replacement of complete pages. Additional pages should be numbered e.g. 1a, 1b etc.

The examiner prefers amendments in handwritten form. However, care should be taken that they are readable especially on the copy for the printer of the European Patent Specification; therefore, only block letters should be used. Care should be taken not to exceed the border lines as required by Rule 35 (6).

The attention of the applicant is drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, Article 123 (2) EPC.

**Bescheld/Protokoll (Anlage)****Communication/Minutes (Annex)****Notification/Procès-verbal (Annexe)**

Datum
Date
Date 23.09.2003

Blatt
Sheet
Feuille 5

Anmelde-Nr.:
Application No.: 00 128 309.2
Demande n°:

An indication in the applicant's letter of reply as to where the amendments have been disclosed in the original application documents would aid the further examination procedure.

Especially when the original disclosure of the amendments is not absolutely obvious, such indications should be provided by the applicant (see Guidelines for the Examination in the EPO, Part E, Chapter II, Paragraph 1.).

M. Hauser-Schmieg



Göteborg
14 January 2004

EUROPEAN PATENT OFFICE
DE-80298 MÜNCHEN

Handled by
Bo Lindberg/Fabian Edlund

Our ref.
EP-2006853

EPO - Munich
22
19 Jan. 2004

SENT BY REGISTERED MAIL

European Patent Application No 00128309.2-2421
in the name of FORD GLOBAL TECHNOLOGIES, INC

Dear Sirs,

In response to the Communication dated September 23, 2003, I hereby submit new claims 1-9. The new independent claim 1 essentially is a combination of the previous claims 1 and 6, and has been redrafted in two-part form. The intended use of the system has also been specified in the preamble, having support e.g. in the description page 1, lines 30-31. Non-essential features relating to commonplace technical elements, such as transceivers and memories, have been cancelled. The original claim 6 has been cancelled and the remaining claims have been renumbered accordingly.

Further, I submit new pages 1, 2, 3 and 11 of the description, amended in accordance with the new claims and with the Examiner's suggestions.

Finally, I would like to submit the following:

The object of the present invention is to provide improved remote communication with a vehicle, enabling monitoring or remote check-up. According to the invention, this object is achieved with a system including a portable unit capable of two different types of communication with a communication unit in the vehicle. Firstly, it can establish a long-distance (e.g. GSM) connection with the vehicle unit via a unit for such communication. Secondly, it can establish a short-distance communication link directly with the vehicle unit when the distance so permits.

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VAT No. SE556082702301

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HELSINGBORG	VÄXJÖ	ÖSTERSUND
LINKÖPING	JÖNKÖPING	

The combination of direct communication with a long-distance communication provides such a communication system.

GB 2347817 (D1) and JP 9048474 (D2) both relate to car phone systems, and are not concerned with monitoring or remote check-up of a vehicle, as specified in the new claim 1. Even disregarding this fact, none of the systems in D1 and D2 feature a portable communication unit providing two different means of communication with another communication unit.

FR 2771982 (D3) and FR 2768831 (D4) are both related to remote interaction with a vehicle, and correspond to the prior art discussed in the background section of the present application, as well as the preamble of the new claim 1. None of the documents, however, disclose a portable communication unit having two means of communication. For good measure, reference to documents D3 and D4 have now been made together with the reference to EP 955 219 on page 1.

EP 1031479 (D5) discloses a biometric sensor for vehicles, intended to eliminate unauthorized use or theft. It does not disclose any remote communication system.

DE 19917885 (D6) discloses a system for remote communication with a vehicle, without any portable communication unit according to the present invention.

EP 1000826 (D7) discloses a remote control system for a vehicle having a vehicle unit (14) which can communicate with a portable unit (12) and a cellular network. However, the portable unit (12) is not adapted to communicate with the cellular network.

It is clear from the above that the invention according to the new claim 1 is novel.

Starting from D3/D4 as closest prior art, the objective problem of the invention is to improve the means of communication with the vehicle communication unit. However, the systems according to D3 and D4 are entirely focused on cellular phone (long-range) communication, and do not even mention the possibility of any combination with limited range communication. On the contrary, the cellular network communication is intended to replace

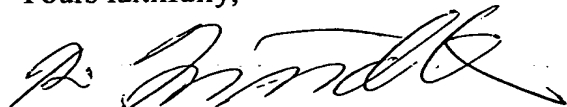
prior art short range communication, in order to solve specific problems related to limited range communication. Thus, it does not seem likely that the skilled person familiar with D3 and D4 would consider such a solution.

If instead D7 is considered as closest prior art, by virtue of its short range communication between vehicle unit 14 and portable unit 12, the objective problem would again be to improve the means of communication with the vehicle communication unit. However, the D7 system already has provisions for long range communication without involving the portable unit. It is therefore unlikely that the skilled man would attempt to implement a second long range communication route, which would require a more complex portable unit.

Therefore, the invention is not obvious over the prior art, and thus involves an inventive step.

In view of the amended claims and the above arguments, it is my opinion that the present application now fulfils the requirements of the EPC, and a communication under Rule 51(4) is respectfully requested.

Yours faithfully,



Bo Lindberg
Authorised Representative
AWAPATENT AB

Encl.

New claims

New pages 1, 2, 3, 11

Acknowledgement copy which please return

CLAIMS

1. A remote communication system for monitoring or performing a remote check-up of a vehicle, comprising a
5 first communication unit (1), located within a vehicle (2), and connectable with a long-distance wireless communication network (16), such as a cellular network (16), characterized in

a second, portable, communication unit (7),
10 including means for communicating with a unit for long-distance wireless communication (14), such as a cellular terminal, for establishing a remote two-way communication link with said first communication unit (1) over said network (16), and means for establishing a direct two-way
15 wireless communication link (8) with said first communication unit (1) when said communication units (1, 7) are within a communication range from each other.

2. A remote communication system according to claim 1, wherein said second communication unit (7) is
20 connectable with said unit for long-distance communication (14) using a short-distance wireless communication link (20).

3. A remote communication system according to claim 2, wherein said second communication unit (7) is a
25 fob unit.

4. A remote communication system according to claim 1, wherein said second communication unit (7) is integrated with a cellular telephone terminal (14).

5. A remote communication system in accordance
30 with any one of the preceding claims, wherein said second communication unit (7) further comprises a biometric sensor (18), for identifying a user.

6. A remote communication system according to any one of the preceding claim, wherein said first communication unit (1) further comprises a first memory circuit
35 (4), and said second communication unit (7) further comprises a second memory circuit (10), whereby an informa-

tion item, stored in any one of said memory circuits, is transmittable to the other one of said memory circuits, over said direct communication link (8) when established.

5 7. A remote communication system according to any one of the preceding claims, wherein said first and second communication units (1, 7) each comprises an identification device, whereby a request for connection from any communication unit is tested to be qualified before enabling a connection between said communication units.

10 8. A remote communication system according to any one of the preceding claims, wherein said first communication unit (1) is connected with at least one vehicle data network (6), such as a controller area network within said vehicle (2).

15 9. A remote communication system according to any one of the preceding claims, wherein said first communication unit (1) is connected with a vehicle computer (5) within said vehicle (2).

20 10. A fob unit, for use in a remote communication system according to any one of the claims 1-9.

REMOTE COMMUNICATION SYSTEM FOR USE WITH A VEHICLE

Technical field of the Invention

The present invention relates to a remote communication system for use with a vehicle. It also relates to a fob unit for use in such a remote communication system.

5

Background art

Many systems for remote tracking of a vehicle, using for example the global positioning system, a cellular network or direct RF communication, are previously known. However, most of these systems are passive, only providing information regarding the position of the vehicle. Further, some systems have been suggested, providing the possibility of remote control of certain features within the vehicle, such as starting the engine for warm-up, but these systems are usually operated with RF communication or the like, thereby having a limited range.

In the patent document EP-0 955 219 a system is suggested in which a cellular telephone terminal may be used in order to connect with a vehicle from a remote connection. However, such a communication is rather unsafe, since a cellular telephone usually does not provide for a safe authorization of the connection before it is established. Furthermore, a cellular telephone is not designed to be used for controlling a vehicle, and consequently, more advanced monitoring may be quite complicated to accomplish. *Similar systems are disclosed in FR 2771982 and FR 2768831.*

Therefore, it is a primary object of the present invention is to provide a system that enables a user to make a safe and simple remote connection with a vehicle, for example for monitoring the vehicle or performing a remote check-up.

Another object of the invention is to provide a flexible system, which may be used in a variety of ways.

<A>: according to claim 1.

2

Summary of the invention

These and other objects are achieved by a remote communication system ^{<A>} ~~for use with a vehicle comprising a~~
5 first communication unit, located within a vehicle, said first communication unit comprising a first transceiver, connectable with a long-distance wireless communication network 16, such as a cellular network; and a second
10 portable communication unit, comprising a second transceiver, connectable with a unit for long-distance wireless communication, such as a cellular terminal, whereby said first and second communication units are connectable with each other using said long-distance wireless communication network, , thereby establishing a remote two-way
15 ~~communication link between said communication units.~~

By establishing a two-way communication link between a portable communication unit and a vehicle, a user is able to perform a remote check-up of the car, for example checking the gas level of the tank or whether the doors
20 of the vehicle are locked. Further, information may be transferred over said link to or from the vehicle. For example, a travel plan, map or the like, stored in the second communication unit, may be transmitted from the second communication unit to the first communication
25 unit.

Preferably, said second communication unit is connectable with said unit for long-distance communication using a short-distance wireless communication link. One example of such a short-distance wireless communication
30 link is a link established between two Bluetooth circuits. By using a wireless communication link, such as the standard Bluetooth, the establishment of said link may easily be accomplished without additional external equipment.

35 Further, said second communication unit is preferably a fob unit. This is a practical solution, since most vehicles today are equipped with a fob for remote lock-

ing/unlocking of the vehicle doors. Consequently, a user of a vehicle normally already carries such a unit, making the system according to the invention consumer friendly.

According to one embodiment of the invention the second communication unit is integrated with a cellular terminal. This construction reduces the number of components of the system.

Further, said second communication unit preferably comprises a biometric sensor ~~As~~ for identifying a user. By first identifying a user, unauthorized remote connection to the vehicle is prevented. Further, this user identification may be used in order to personalize the vehicle and different vehicle settings.

~~Preferably, a direct short-distance two way wireless communication link is established between said first and second transceivers when said communication units are within a direct communication range from each other.~~ Further, said first communication unit suitably comprises a first memory circuit being connected with said first transceiver, and said second communication unit further comprises a second memory circuit being connected with said second transceiver, whereby an information item, stored in any one of said memory circuits is transmittable to the other one of said memory circuits, over said direct short-distance communication link when established. Consequently, over this communication link it is possible to transfer information between a portable unit and the vehicle, without active user assistance.

Preferably, said first and second communication unit each comprises an identification item, whereby a request for connection from any communication unit is tested to be qualified before a connection between said communication units is enabled. Thereby, a second communication unit requesting to connect with a first communication unit within a vehicle over said cellular network is identified, and unauthorized requests may be denied. This feature also makes it possible to determine which commu-

<A>: On the contrary, many
: herein described embodiments

11

The present invention should not be considered as being limited to the above-described embodiment. ~~But rather~~
~~includes all possible variations falling within the~~
~~spirit and the scope of this invention as defined by the~~
5 ~~appended claims.~~ ^{<A>} Many modifications and variations of the
~~present invention~~ will be readily apparent to those
skilled in the art. *Examples of such variations are given below.*

In the above, a preferred embodiment is described in which the second communication unit is comprised in a
10 separate fob unit. However, it is possible to include
said second communication unit in for example a cellular
telephone or a portable handheld computer, reducing the
number of components of the system.

The system may also include a panic button, being
15 placed on the fob unit (the second communication unit).
When pushing said panic button, a message is automati-
cally sent, via a communication link 20 to a nearby posi-
tioned cellular telephone terminal 14 and the cellular
network 16, to the vehicle and to an alarm center,
20 whereby a user is able to signal that he is in danger. By
using the biometric sensor, as described above, the alarm
message may further include information regarding the
identity of the current user of the fob. It is also pos-
sible, by means of a positioning system, such as GPS or
25 the like, to include information regarding the position
of the user in the alarm message.

The above-described presently preferred embodiment of
the invention utilizes Bluetooth circuits as the trans-
ceivers in the fob, the cellular telephone and also in
30 the first communication unit in the vehicle. However, it
is possible to use other devices and methods to establish
said two-way connection between the first said devices.
For example, RF circuitry may be used. The above men-
tioned devices should then also include control circuits
35 for the RF circuits in order to control the communication
link and its establishment, on per se known manner. The
corresponding control circuits are included in the Blue-